

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

28 FEB 2005



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| Applicant's or agent's file reference CPW/20693 | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/GB 03/03751 | International filing date (day/month/year) 29.08.2003 | Priority date (day/month/year) 29.08.2002 |
| International Patent Classification (IPC) or both national classification and IPC A61K45/06 | | |
| Applicant CIPLA LTD et al. | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

| | |
|---|---|
| Date of submission of the demand 22.03.2004 | Date of completion of this report 24.11.2004 |
| Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | Authorized Officer Blott, C Telephone No. +49 89 2399-7538  |

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB 03/03751

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*:

Description, Pages

1-26 as originally filed

Claims, Numbers

1-33 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

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III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 31-33

because:

☒ the said international application, or the said claims Nos. 31-33 (industrial applicability), relate to the following subject matter which does not require an international preliminary examination (specify):

see separate sheet

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the said claims Nos.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the Standard.

☐ the computer readable form has not been furnished or does not comply with the Standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|-------------------|
| Novelty (N) | Yes: Claims | 2,4-7,9-26,28,32 |
| | No: Claims | 1,3,8,27,29-31,33 |
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 1-33 |
| Industrial applicability (IA) | Yes: Claims | 1-30 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

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Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Claims 31-33 relate to a subject-matter considered by this authority to be covered by the provisions of Rule 67.1(iv) PCT. Consequently, no opinion will be formulated with respect to the industrial applicability of the subject-matter of these claims (Art. 34(4)(a)(i) PCT).

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document/s/:

D1: US-B-6 423 2982 (D.P.MCNAMARA, G.A.DESTEFANO) 23 July 2002 (2002-07-23)

D2: M.MIRAVITLLES E.A.: "Treatment and quality of life in patients with chronic obstructive pulmonary disease" QUALITY OF LIFE RESEARCH, vol. 11, no. 4, 2002, pages 329-338, XP008018999

D3: WO 02/07672 A (AEROPHARM TECHNOLOGY) 31 January 2002 (2002-01-31)

D4: R.K.GUPTA, S.K.CHHABRA: "An evaluation of salmeterol in the treatment of chronic obstructive pulmonary diseases" THE INDIAN JOURNAL OF CHEST DISEASES & ALLIED SCIENCES, vol. 44, no. 3, 2002, pages 165-172, XP008018997

a) D1 discloses pharmaceutical preparation for propellant driven metered dose inhalers comprising at least two active substances e.g. beclometasone, budesonide, cromoglycinic acid, fenoterol, flunisolide, fluticasone, ipratropium bromide, nedocromil, orciprenaline, oxitropium bromide, reproterol, salbutamol (albuterol), salmeterol, terbutalin. One particularly preferred embodiment comprises suspended salbutamol sulphate, dissolved ipratropium bromide, ethanol as co-solvent and citric acid as stabiliser.

b) In document D2, patients with COPD were treated with a short-acting β_2 agonist, ipratropium bromide and an inhaled corticosteroid (budesonide, fluticasone or beclomethasone (cf. p. 332, col. 2, table II)).

c) D3 discloses a medicinal aerosol formulation, which comprises at least two different particulate medicaments selected from the group consisting of β_2 adrenergic agonists, corticosteroids, anticholinergics, histamine antagonists, nonsteroidal antiinflammatory agents and leucotriene modulators.

d) In D4, patients inhaled four-times-daily ipratropium and twice-daily beclomethasone

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dipropionate, together with salmeterol (twice daily) or placebo.
Inhaled salbutamol was given on an as-needed basis (cf. abstract and p. 166, col. 2).

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1, 3, 8, 27, 29-31, 33 is not new over D4 in the sense of Article 33(2) PCT.

Claims 2, 4-7, 9-26, 28, 32 do not seem to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see documents D2 and D4 and the corresponding passages cited in the search report (Article 33(3) PCT).

It is pointed out that no evidence for the claimed effect has been provided by the applicant. The application does not provide any results of tests carried out with the products in the field of activity at issue.

For the assessment of the present claims 31-33 on the question whether they are industrially applicable, no unified criteria exist in the PCT Contracting States. The patentability can also be dependent upon the formulation of the claims. The EPO, for example, does not recognize as industrially applicable the subject-matter of claims to the use of a compound in medical treatment, but may allow claims to a known compound for first use in medical treatment and the use of such a compound for the manufacture of a medicament for a new medical treatment.

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